

IN THE UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF ARKANSAS  
CENTRAL DIVISION

CCD HOLDINGS, LLC

PLAINTIFF

v.

CASE NO. 4:19cv102 JM

CENERGY USA, INC.; WAL-MART  
STORES, INC.; WAL-MART.COM USA, LLC;  
MAGIC DIRT LLC; and MAGIC DIRT  
HORTICULTURAL PRODUCTS LLC

DEFENDANTS

ORDER

This is an action for patent infringement. On September 27, 2021, the Court entered an order construing the term “solvent” to mean “a substance combined with the lignocellulosic fiber, and which dissolves or disperses one or more other substances.”<sup>1</sup> (Doc. 119). Defendants Cenergy USA, Inc., Magic Dirt LLC and Magic Dirt Horticultural Products LLC (collectively “Magic Dirt”) have moved for summary judgment arguing that with this construction, Plaintiff CCD Holdings, LLC (“CCD”) cannot establish that its claims have been infringed. (Doc. 120). CCD filed a response to the motion, and Magic Dirt filed a reply.

The parties agree on the law to be applied. “An infringement analysis involves a two-step process: the court first determines the meaning of disputed claim terms and then the accused device is compared to the claims as construed.” *McGinley v. Luv N' Care Ltd.*, 819 F. App'x 913, 917 (Fed. Cir. 2020) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996)). “The second step, the determination of infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998). Summary judgment on the issue of infringement is proper

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<sup>1</sup> The parties agreed on the meaning of this term except that Plaintiff wanted to include the phrase “or is *capable* of dissolving or dispersing” following the phrase “dissolves or disperses.”

“when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device.” *Wi-LAN USA, Inc. v. Ericsson, Inc.*, 675 F. App'x 984, 992 (Fed. Cir. 2017) (quoting *Bai* at 1353). Under the doctrine of equivalents, all the limitations of the claim must be satisfied at least equivalently. *Id.*

In support of their motion for summary judgment, Magic Dirt submitted a statement of undisputed material facts. (Doc. 120 at 3-9). These asserted facts primarily come from the declaration of Robert Joblin, president of Cenergy USA, Inc. (a managing member of Magic Dirt LLC and Magic Dirt Horticultural) and a co-inventor on the Magic Dirt Patent:<sup>2</sup>

- The potting soil product sold under the MAGIC DIRT trademark (“Magic Dirt”) does not include any solvent combined with the lignocellulosic fiber processed by ruminant digestion and anaerobic digestion (hereinafter “AD fiber”).
- Magic Dirt is made of pine bark combined with AD fiber. The AD fiber was produced using an organic waste processing system substantially in accordance with the process disclosed in the Dvorak Patent.<sup>3</sup>
- In order to lower the pH of the AD Fiber to a level conducive for plant nutrition and growth, aged pine bark is combined with AD Fiber in a volume ratio of about 25% bark to about 75% Ad Fiber.
- Magic Dirt is made with the following process disclosed in the Matic Dirt Patent:

In operation of the waste-processing system, cow manure is transferred to the mixing chamber, where the manure is mixed with activated sludge (essentially the liquid fraction saved from the previous digestion/processing of manure). That sludge-like mixture is heated to approximately 105 to 130 degrees Fahrenheit. (Heavy solids such as grit fall to the bottom of the mixing chamber under the influence of gravity and are removed using an auger in the bottom of the mixing chamber, and transferred to a disposal site.) After a stay of approximately one day in the mixing chamber, the sludge flows through an opening in the wall separating

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<sup>2</sup> U.S. Patent No. 9,382,166 issued to Magic Dirt LLC in 2016.

<sup>3</sup> U.S. Patent No. 6,451,589 issued to Steve Dvorak in 2002.

the mixing chamber and the digester, where anaerobic digestion takes place. The activated sludge added to the manure in the mixing chamber serves to start the anaerobic digestion process.

The digester is essentially a long enclosed chamber having a center wall running most of the length of the chamber, thereby forming a U-shape digestion pathway; the digester has a long sludge flow path, and thus a long residence time of approximately twenty days. As the sludge flows through the digester, anaerobic digestion processes the manure sludge into activated sludge.

From the digester, the activated sludge flows into a clarifier chamber. The clarifier uses gravity to separate the activated sludge into liquid and solid portions. Under the influence of gravity and separation panels, the liquid portion rises to the top of the mixture and is decanted away. The solid portion of the activated sludge settles to the bottom of the clarifier. Sometimes the solids are subjected to mechanical press processing to reduce the moisture content; such processing is not recommended for the disclosed composition, because that will reduce the length of fibers unnecessarily. Unlike the '589 patent and other known prior art, most of the activated sludge is removed from the clarifier and is processed through a screen separator ... .

The fibers of the present invention have a second processing step not disclosed in the '589 patent, namely, an additional step of heat drying the fibers while they are free- falling. The fibers of the present invention are transported to approximately 15 to 20 feet above the ground level, then pumped out into the air and through an airstream having a temperature of approximately 100 degrees Fahrenheit. This aerates and separates the fibers, and causes them to dry as they descend. It also provides the fibers with a more airy, fluffy consistency, which allows further drying after free-fall drying. ...

After drying, the fibers are preferably mixed with pine bark, preferably aged pine bark, to yield a composition having the desired pH, preferably about 6.7. At this time, it is ready to function as a premium potting soil.  
(Magic Dirt Patent, col. 5 line 27 to col. 6 line 34.)

- The bark mixed with the AD Fiber is drier than the AD fiber, and it is not a solvent; it does not dissolve or disburse the AD Fiber.
- Nothing besides bark is combined with the AD Fiber to produce Magic Dirt potting soil.

A portion of Joblin’s declaration that was not included in Defendants’ statement of undisputed material facts describes the process that occurs before the cow manure is transferred to the mixing chamber: “In collecting cow manure (for the fiber) and transporting it to the digester, the manure is usually scraped or flushed off the concrete in the barns and milking parlor prior to the digester or vacuumed into a truck for transport to the digester. Before entering the digester, the manure is usually stored in a waste/sludge holding pit, where it is diluted to facilitate flow into through the digester.” (Doc. 120 at 8.)

Applying the Court’s construction of the term solvent, which appears in each of the asserted claims,<sup>4</sup> Defendants argue that CCD cannot establish that Magic Dirt potting soil infringes on any of the three patents at issue. Defendants analyze what they contend is the broadest of the asserted claims for each of the three patents—claim 13 of the ‘652, claim 16 of the ‘879 Patent, and claim 1 of the ‘730 Patent—and assert that if Magic Dirt does not infringe on these claims, it does not infringe on any of the other asserted claims.

Claim 13 of the ‘652 Patent provides:

13. Animal bedding, comprising: at least one solvent, wherein the at least one solvent comprises water present in a concentration of less than approximately 70% weight; a lignocellulosic fiber, wherein the lignocellulosic fiber has been processed by ruminant digestion and anaerobic digestion; and wherein the density fiber of the animal bedding ranges from approximately 0.950 grams per cubic centimeter to approximately 1.40 grams per cubic centimeter.

Claim 16 of the ‘879 Patent provides:

16. A lignocellulosic fibrous composite, comprising: at least one solvent, wherein the at least one solvent comprises water; a lignocellulosic fiber, wherein the lignocellulosic fiber has been processed by ruminant digestion and anaerobic

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<sup>4</sup> The asserted claims are: U.S. Patent No. 8,893,652 (the “652 Patent”), claims 1, 13, and 19; U.S. Patent No. 8,894,879 (the “879 Patent”), claims 1, 5, 7, 8, 11 and 16; and (3) U.S. Patent No. 10,244,730 (the “730 Patent”), claims 1, 12, 14, and 15.

digestion; wherein the at least one solvent is present in a concentration of less than approximately 70% by weight; and wherein the density of the lignocellulosic fibrous composite ranges from approximately 5 pounds per cubic foot to approximately 19 pounds per cubic foot.

Claim 1 of the ‘730 Patent provides as follows:

1. Digestate composition, comprising: at least one solvent; a lignocellulosic fiber processed by ruminant digestion and anaerobic digestion; and wherein a density fiber of the digestate composition ranges from between approximately 0.400 grams per cubic centimeter to approximately 1.40 grams per cubic centimeter.

These three claims specify that the patented product—animal bedding, a lignocellulosic fibrous composite, and a digestate composition, respectively—comprises (1) at least one solvent and (2) a lignocellulosic fiber that has been processed by ruminant digestion and anaerobic digestion (which Magic Dirt refers to as “AD Fiber”). Magic Dirt argues that since each of the disputed claims requires that a solvent be added to AD Fiber, and since there is no solvent added to the AD Fiber in the Magic Dirt invention, there can be no infringement. The evidence submitted by Magic Dirt establishes that once the fiber is processed through the ruminant and anaerobic digesters, the only thing added to the fiber is pine bark.

CCD did not file a statement setting forth the material facts it contends are in genuine dispute and did not controvert the statement of material facts put forth by Magic Dirt. Instead, in addition to addressing the merits of the motion, CCD submitted a Rule 56(d) affidavit asserting that it needed to conduct discovery to learn “the exact process utilized by Defendants in producing both the fiber for use in their Matic Dirt product, and the Magic Dirt product itself” before it could fully respond to the motion.<sup>5</sup> (Doc. 128 at 7). Specifically, the Rule 56(d)

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<sup>5</sup> The scheduling order proposed by the parties and entered by the Court provided for a fact discovery cutoff of 90 days after the Court entered its claim construction order and expert discovery cutoff of 120 days after the claim construction order. (Doc. No. 74). The claim construction order was entered on September 27, 2021, making these discovery cutoffs

affidavit states:

The question of infringement turns on several factors, including whether and when a solvent is added in the aforementioned processes. The substance of Defendants' Motion for Summary Judgment of Non- Infringement rests entirely on the premise that there is no solvent added in its processes and that pine bark is not a solvent. However, the process disclosed in the Dvorak Patent (U.S. Patent No. 6,451,589) upon which Defendants admit reliance, discloses the addition of a solvent in its process. Defendants claim "substantial" reliance on the Dvorak Patent, but there has been no conclusive discovery conducted to determine what that means. *Id.*

Under to Rule 56(d), the court has discretion to defer considering the motion or allow time for more discovery if the nonmoving party establishes "it cannot present facts essential to justify its opposition." Fed. R. Civ. P. 56. "It is not enough to present a list of facts sought to be discovered. The nonmovant must "articulate how those facts [a]re relevant to rebut the movant's showing of the absence of a genuine issue of fact." *In re Mirapex Prod. Liab. Litig.*, 912 F.3d 1129, 1135 (8th Cir. 2019) (quoting *Ray v. American Airlines, Inc.*, 609 F.3d 917, 923 (8th Cir. 2010) (quotation omitted).

Contrary to CCD's argument, the Court reads Magic Dirt's motion as resting on the premise that no solvent is added *after* the fiber goes through the process of ruminant digestion and anaerobic digestion, a process disclosed in the Dvorak Patent. Magic Dirt does not argue that there is no solvent used in the entire process. Therefore, conducting discovery to learn more about the process used in the Dvorak Patent that Magic Dirt substantially relies on would not produce evidence that could defeat a motion for summary judgment based on what happens after the fiber has completed the digestion process disclosed in the Dvorak Patent.

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December 27, 2021 and January 25, 2022, respectively. However, by agreement of counsel, all proceedings have been stayed pending the Court's decision on this pending motion for summary judgment. (Doc. 130). The agreement was apparently negotiated in exchange for Defendants' agreement to Plaintiff's request for extension of time to file a response to the motion for summary judgment following a calendaring error. (Doc. 125, ¶ 6.)

CCD argues that while the Dvorak Patent discloses a process whereby a solvent is added at some point during the process of ruminant and anaerobic digestion, it does not *exclude* solvent being added after some ruminant and anaerobic digestion has occurred. The fact that the Dvorak Patent does not disclose a solvent being added after the fiber has completed the anaerobic digestion process along with Joblin's affidavit stating that nothing besides bark is combined with the AD Fiber to make Magic Dirt leaves no genuine issue of material fact remaining for a jury to determine. Furthermore, while CCD did agree to a stay of this case after the summary judgment motion was filed, the case has been pending since April of 2018 and Plaintiff had opportunity to conduct discovery, and did to a limited extent, during that time.

CCD also makes a strained argument that pine bark can function a solvent in the context of this patent infringement dispute. Again, the Court construed solvent to mean "a substance combined with the lignocellulosic fiber, and which dissolves or disperses one or more other substances." Each of the three disputed claim's patent specifications states the following regarding solvents:

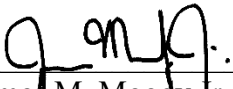
One or more solvents of [animal bedding/lignocellulosic fibrous composite/digestate composite] preferably comprise water, but other solvents are likewise contemplated for use in accordance with the present invention, including nonpolar solvents (e.g., pentane, hexane, benzene, toluene, chloroform, diethyl ether, etcetera) polar aprotic solvents (e.g., acetone, propylene carbonate, tetrahydrofuran, etcetera) and/or polar protic solvents (e.g., water, methanol, ethanol, isopropanol, acetic acid, formic acid, etcetera).

A solid substance such as pine bark was not "contemplated for use" as a solvent in the disputed claims, assuming it could ever be classified as a solvent.

THEREFORE, the Court finds that Defendants are entitled to summary judgment on Plaintiff's claims of patent infringement and on Defendant's counterclaim for a declaratory judgment of non-infringement and the motion (Doc. 120) is GRANTED.

Defendants are directed to advise the Court by September 2, 2022 whether they intend to pursue their remaining counterclaims for invalidity, unenforceability, and inequitable conduct or whether, as requested in the motion for summary judgment, they are asking that “the case” (not just the complaint) be dismissed with prejudice.

IT IS SO ORDERED this 23rd day of August, 2022.

  
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James M. Moody Jr.  
United States District Judge